

REMARKS

This Amendment is in response to the Office action mailed on November 19, 2008. Fees for one (1) additional independent claim in excess of 3 are submitted herewith (by credit card). It is believed that no additional fees are necessary in connection with the present Amendment. However, in the event any fees are due, kindly charge the cost thereof to our Deposit Account No. 13-2855.

Status of Claims

Claims 1-13, 15 and 17 are canceled. Independent claims 14, 23 and 25 are amended. No new matter has been added by way of these amendments. Support for the language "other of said print head and said platen being connected to said support" may be found in the specification, for example at page 9, lines 8 to 17 (describing that the distance between the printhead cover 3 and the platen 10 is "fixed"). Support for the language "wherein the compressor is connected between one of: the first frame and said one of said printhead and platen; and the support and said other of said printhead and platen" may be found in claim 15 and page 11, lines 10-17. Independent claim 22 is still pending. New claims 26-34, of which claim 34 is an independent method claim similar to apparatus claim 22, are added by way of this Amendment. No new matter is added by these new claims.

Response to Claim Objections

Claim 20 was objected to due to a lack of a comma between "first frame" and "the driver" in line 2. Claim 20 is hereby amended to add the comma, as suggested in the Office action.

Response to Rejections Under 35 U.S.C. § 102(b)

Claims 14, 15, 18 and 19 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Connor, U.S. Publication No. 2002/0080223 A1 (“Connor”). It is respectfully submitted that Connor does not disclose “wherein the compressor is connected between one of: the first frame and said one of said printhead and platen; and the support and said other of said printhead and platen” as recited in claim 14, as amended. Moreover, claim 14 recites that a “first frame” is slideably connected to a “support” to cause a printhead/platen mounted on the first frame to move in a linear direction towards the other of the printhead/platen connected to the support. Looking at Figure 4 of Connor, only the loading rod and extension rod are driven to cause one of a print head and platen to move in a linear direction towards the other of a print head or platen connected to a support. So, in order to read onto the claimed combination of features, if the carriage 20 and supporting structure 70 are together considered equivalent to the “support” in the claim, then the loading rod 30 and extension rod 13 may be considered equivalent to the “first frame”.

In claim 14, as amended, the “compressor” is recited as being arranged to exert a biasing force. The only element shown in Connor capable of asserting a biasing force is the spring 32. As discussed in paragraph 22 of Connor, and as shown in Figure 4 of Connor, the spring lies between the carriage top 23 of carriage 20 (which, as discussed above, is interpreted as being equivalent to the “support” of claim 14) and a nut 31, which is threaded on the loading rod 30 (which, again as discussed above, is interpreted as being equivalent to the “first frame” of claim 14). This arrangement in Connor is made possible by the way in which the shaft of motor 41 is

mechanically connected to the loading rod 30 to allow vertical movement of the loading rod with respect to the motor.

In contrast, claim 14 recites that the compressor is connected between the first frame and whichever of the print head and platen are mounted on the first frame, or between the support and the other of the print head and platen. Such an arrangement is neither taught nor suggested in Connor. Claim 14, as amended, is therefore not anticipated by Connor. Withdrawal of the rejection is respectfully solicited.

Response to Rejection Under 35 U.S.C. § 103

Claim 20 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Connor. According to the Office action, it would have been obvious to one of ordinary skill in the art to have the driver 41 of Connor exert a controlling driving force on the compressor and the third frame to prevent sudden and jarring motion in the apparatus.

Claims 16, 17 and 21 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Connor in view of Ando, U.S. Patent No. 6,480,216 ("Ando"). As to claim 16, the Office action concedes that Connor does not teach a second frame and the other of the platen and printhead being mounted on the second frame. However, according to the Office action, based on Ando's teaching of a frame for supporting the platen 51, it would have been obvious to one of ordinary skill in the art to provide a frame for the platen to prevent it from falling out and allow for printing. As to claim 17, the Office action concedes that the proposed combination of Connor and Ando do not teach that a compressor arranged to compressibly support the second frame. However, according to the Office action, both Connor and Ando

provide a compressor to support frames movably, and whereas Connor teaches the provision of compressors for compressing the upper frame of the printing unit, Ando teaches compressors provided for a lower frame of the printing unit. From these teachings, according to the Office action, it would have been obvious to one of ordinary skill in the art to provide compressors for both upper and lower frames of the printing unit to allow for adjustments on both ends for the height and pressure of the contact between the printhead and the platen.

As to claim 21, the Office action concedes that Connor does not teach the support 70 to be arranged so that the frame will be driven relative to the support. However, according to the Office action, it would have been obvious to rearrange the support 70 in a vertical fashion to provide for a thinner printing assembly, and in that case, the vertical driving of the first frame would be relative the arrangement of the support 70.

Claims 22-25 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Connor in view of Sims et al., U.S. Patent No. 6,380,965 ("Sims"). According to the Office action, Connor does not teach a device for inputting data, but based on Sims teaching of a device for inputting data for a printing device and a control means for controlling the printing apparatus, it would have been obvious to use the controlling device to control the initial position of the first frame and the printhead in accordance with the input data to provide the appropriate style and pressure of printing in accordance with the type and size of the substrate.

As to claim 23, while Connor does not teach a device for inputting data, according to the Office action, providing an input device for inputting data for the purpose of controlling the printer based on conditions observed by an operator would have been obvious, based on Sims teaching of a device for inputting data for a printing device.

Regarding claim 24, according to the Office action, it would have been obvious to use the controlling device to control the initial position of the first frame and the printhead in accordance with the input data to provide the appropriate style and pressure of printing in accordance with the type and size of the substrate, based on Sims teaching of a control means for controlling the printing apparatus.

Without conceding the merits of these rejections, it is respectfully submitted that Connor does not provide any teaching or suggestion that the spring 32 could instead be connected between the loading rod 30/extension rod 13 and one of the printhead or platen, and there is no suggestion that the spring may alternately be connected between the carriage 20/supporting structure 70 and the other of the print head and platen, as recited in claims 14, 23 and 25, as amended. Withdrawal of the obviousness rejections of claim 20, which depends from claims 14 as amended and 18, is therefore respectfully requested. In addition, because Connor as modified by Ando in the manner proposed in the Office action would still not satisfy:

a first frame slideably connected to said support, one of said printhead and said platen being mounted on said first frame and the other of said printhead and said platen being connected to said support;
a driver for driving said first frame relative to said support to cause the one of said printhead and platen to move in a linear direction toward the other; and
a compressor arranged to exert a biasing force on one of said printhead and said platen, when said driver drives said first frame relative to said support, wherein the compressor is connected between one of: the first frame and said one of said printhead and platen; and the support and said other of said printhead and platen

as recited in claim 14, as amended, it is respectfully submitted that the proposed combination of Connor in view of Ando would not result in what is recited in Applicant's claims 16, 17 and 21, which depend, directly or indirectly, from claim 14.

As to the proposed modifications of Connor in view of Sims, with reference to Figures 8a and 8b of Sims, it can be seen that a platen 102 and a printhead 104 are provided. If the platen 102 were considered to be connected to a support in the manner suggested in the Office action, then, in order for the printhead to be able to move towards the platen, the support base 103 (on which the printhead is supported) might be considered as the “first frame” referred to in Applicant’s claim 14, as amended. However, the only element shown in Sims that could arguably be considered a “compressor arranged to exert a biasing force”, as additionally recited by claim 14, as amended, is compression spring 109. But this spring is provided between the elements that would correspond to the recited support and the first frame. Therefore, the proposed combination would not result in the Applicants’ claims 14, 23 or 25, as amended, or the claims depending therefrom, because the combination would not result in the recited elements arranged in the manner recited in the claim. *See, e.g., Net MoneyIn v. VeriSign*, 545 F.3d 1359, 1369 (Fed. Cir. 2008) (holding, in an anticipation context, that a reference must teach “all of the limitations arranged or combined in the same way as recited in the claim.” (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983))). It is respectfully submitted that, even in an obviousness context, the proposed combination of references would still need to result in a construction in which all elements are arranged or combined in the same manner as recited in the claim to support a prima facie case of obviousness.

With regard to claim 22, it is respectfully submitted that the reference in the Office action to “a device for inputting data” and “compression means” are not included in the Applicant’s claim 22. Moreover, the Office action does not indicate that Sims discloses “driving said first frame relative to said support in accordance with information stored with said image receiving

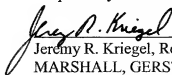
substrate, to cause the one of said printhead and platen to move in a linear direction toward the other", as recited in claim 22. It is respectfully submitted that Connor does not teach or suggest, alone or as modified in view of Sims, driving a frame relative to a support in accordance with information *stored with the image-receiving substrate*. Although Connor mentions that a frame can be driven in response to information input by an operator, or by measuring the thickness or stiffness of the media, Connor is not refer to driving the frame based on information stored with the substrate.

The Applicant's claimed system and method provide a printhead that is accurately positionable relative to a variety of thicknesses and materials of image receiving substrate, using a relatively simple mechanism. The printhead of the Applicant's claimed system and method may also be positioned in such a way that the printing area of the printhead is correctly aligned with the media, which is not the case with pivotally mounted printheads, such as shown in Sims.

In view of the foregoing amendments and remarks, it is respectfully submitted that the Applicant's claims are in condition for allowance. The Examiner's reconsideration and favorable action are respectfully requested.

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Respectfully submitted,



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